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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,089	02/13/2004	Yasuaki Tsuchiya	Q79882	4112

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/777,089	<b>Applicant(s)</b> TSUCHIYA ET AL.	
	<b>Examiner</b> Michael A. Marcheschi	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 2/13/04.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(a) as anticipated by Merchant et al.

The reference teaches in column 3, line 28-column 4, line 20, a polishing composition having a pH of 3 comprising an abrasive (claimed amount defined), a water soluble oxidizer (amount defined), 1,2,4 triazole (amount defined) and water.

The claimed invention is anticipated by the references because the references teach compositions which comprises all of the claimed components. The references also teach methods which read on the instant method. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention absent evidence to the contrary.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being obvious over Merchant et al.

The reference teaches amounts for the ammonium nitrate and triazole components and although these amounts are not defined in weight percent, it is the examiners position that when

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the amounts of the reference are converted to weight percent, they broadly encompass the claimed amounts, absent evidence to the contrary, and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). With respect to the ratio of components, when the ratio is calculated from the weight percents above, the calculated ratio can encompass and therefore makes obvious the claimed range. With respect to the polishing rate ratio, since the composition is the same, this limitation is expected because the same composition is expected to yield the same results absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being obvious over Mandigo et al. in view of Merchant et al.

Mandigo et al. teach in section [0016] and , [0025]-[0027], a polishing composition having the claimed pH comprising a ammonium nitrate (claimed amount), a corrosion inhibitor (claimed amount) and water.

The primary reference teaches that a corrosion inhibitor can be employed and it is the examiners position that the broad interpretation of this makes 1,2,4 triazole obvious because it is a known corrosion inhibitor, as is clearly shown by Merchant et al. The use of any known corrosion inhibitor in the composition of the primary reference would have been obvious because in view of the broad disclosure of a corrosion inhibitor. Although the primary reference teaches benzotriazole (BTA), this is a mere example and can be seen from the phrase "such as".

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Assuming *arguendo*, the substitution of one corrosion inhibitor for another that is used for the same purpose (in polishing compositions) is well within the level of ordinary skill in the art. In addition, the secondary reference teaches that 1,2,4 triazole and BTA are functional equivalent inhibitors in polishing composition and the interchangeability of functional equivalent materials is also within the scope of the skilled artisan. With respect to the amounts of the components, the primary reference teaches amounts which encompass the claimed amounts and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). With respect to the ratio of components, the ratio, when calculated, can encompass and therefore makes obvious the claimed range. With respect to the polishing rate ratio, since the composition is the same, this limitation is expected because the same composition is expected to yield the same results absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being obvious over Tsuchiya et al. (834) in view of Barr.

Tsuchiya et al. teach in column 7, line 15-column 9, line 15, a polishing composition having the claimed pH comprising a water soluble oxidizer (claimed amount), 1,2,4 triazole (claimed amount) and water.

Barr teaches I claim 7 that ammonium nitrate is a water soluble oxidizing agent.

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The primary reference teaches that a water soluble oxidizing agent can be employed as the oxidizer and it is the examiners position that the broad interpretation of this makes ammonium nitrate obvious because it is a water soluble oxidizing agent, as is clearly shown by Barr. With respect to the amounts of the components, the primary reference teaches amounts which encompass the claimed amounts and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). With respect to the ratio of components, the ratio, when calculated, can encompass and therefore makes obvious the claimed range. With respect to the polishing rate ratio, since the composition is the same, this limitation is expected because the same composition is expected to yield the same results absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being obvious over Schroeder et al. in view of Merchant et al.

The primary reference teaches in section [00121] and [0035]-[0039], a polishing composition having the claimed pH comprising any oxidizing agent (claimed amount), 1,2,4 triazole (claimed amount) and water.

The primary reference teaches that any oxidizing agent can be used, such as nitrates, and it is the examiners position that the broad interpretation of a nitrate oxidizer makes ammonium nitrate obvious because this is a well known nitrate oxidizer, as is clearly shown by Merchant et

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al. With respect to the amounts of the components, the primary reference teaches amounts which encompass the claimed amounts and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). With respect to the ratio of components, the ratio, when calculated, can encompass and therefore makes obvious the claimed range. With respect to the polishing rate ratio, since the composition is the same, this limitation is expected because the same composition is expected to yield the same results absent evidence to the contrary.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v.*

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***Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971).**

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.  
Evidence of unexpected results must be commensurate in scope with the subject matter claimed.  
*In re Linder* 173 USPQ 356.

The references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5/05  
MM

Michael A Marcheschi  
Primary Examiner  
Art Unit 1755